

REPORT ON A SMALL COLLECTION OF PARASITIC HYMENOPTERA FROM JAVA AND SUMATRA

by

A. B. GAHAN.

(U. S. Bureau of Entomology, Washington, D. C.)

The following parasitic Hymenoptera were received by the writer through the U. S. Department of Agriculture, Bureau of Entomology, from Mr. S. LEEFMANS, of the Institute for Plant Diseases, Buitenzorg, Java. Six species of the lot proved apparently new, while interesting new host records are obtained for the other four species.

Superfamily Chalcidoidea.

Family Eulophidae.

Asympiesiella india GIRAULT.

Three females, comprising lot B, received with Mr. LEEFMANS letter dated November 27, 1919, and said to have been reared from larva of *Gracilaria theivora* Walsingham, Goenoeng Mas, 1200 m. near Buitenzorg, Java, apparently agree very nicely with the type specimen of this species which is in the U. S. National Museum.

Diaulomella javensis, new species.

Differs from the description of *D. australiensis* GIRAULT in having the pedicel distinctly though not a great deal longer than broad, the antennal club equal to or barely longer than the first funicle joint, the coxae basally yellowish brown, and the hind femora with a brownish spot on the outer side beyond the middle.

Female.—Length 2.25 mm. Head reticulate punctate, more or less shining; postocellar line distinctly longer than the ocellocular line; first, second, and third funicle joints subequal and each more than twice as long as broad; fourth funicle joint, about twice as long as broad; club 3-jointed, pointed at apex and subequal to the first funicle joint in length, the apical joint very small; mandibles with six or seven small teeth; pronotum, mesoscutum, axillae, and scutellum with close strong thimble-like punctures; propodeum similarly sculptured; abdomen about as long as the head and thorax, nearly smooth, with some faint reticulations. Face, antennal flagellum, coxae except apically and spot on the hind femora beyond middle, brownish; scape, pedicel, legs except coxae basally, venter of abdomen except margins and apical one-third, and a large triangular spot at base on the dorsum, pale yellowish or nearly white; head brownish black with more or less strong metallic green lustre especially on the vertex; thorax metallic blue green with strong violaceous reflections on the mesoscutum and scutellum; abdomen except as noted, brownish black; wings hyaline.

Male.— Length 1.8 mm. Agrees in sculpture and color with the female except that the propodeum is less heavily punctate, the thorax is coppery green, lacking for the most part the violaceous reflections, and the hind femora are dark brown from the middle outward. The antennae are branched as in males of *Asympiesiella* GIRAULT; scape slightly flattened and about three times as long as broad; pedicel barely longer than broad; first funicle joint the shortest of the funicle joints but nearly twice as long as the pedicel, thickest at base and with a long ramus arising at the base above and extending somewhat beyond the middle of the fourth funicle joint; second funicle joint slightly longer than the first with a similar ramus which reaches approximately to the base of club; third joint a little longer than the second with the ramus reaching to the middle of club; fourth joint without a ramus and very slightly longer than joints two and three combined; club three-jointed, thicker than the funicle, about three-fourths as long as the fourth funicle joint, the club joints closely joined, not pedicellate, and the first distinctly longer than the second, the third joint represented by an apical spine; the rami of the funicle as well as the rest of flagellum with long hairs.

Type locality.— Goenoeng mas, 1200 m. near Buitenzorg, Java.

Type.— Cat. No. 24653 U. S. Nat. Mus.

One female and one male said to be obtained as a parasite or a hyperparasite from a mixed lot of caterpillars of *Glacilaria* and *Laspeyresia*. Received from S. LEEFMANS with letter dated November 27, 1919 and under Lot E. Antennae from type and allotype mounted on a slide; other material on card points.

The above described male is very similar to the male of *Asympiesiella india* GIRAULT in color as well as otherwise, differing principally in the longer first funicle joint and the three-jointed club of which the joints are closely joined together.

***Mestocharella javensis*, new species.**

Agrees with the description of the genus except that the propodeum lacks a definite median carina. The propodeum is rugose with a large pentagonal-shaped, carinately bounded, central areola extending from base to apex and occupying approximately one-third of the whole surface of propodeum, this areola rugose within like the remainder of the propodeum.

Female.— Length 1.85 mm. Face and frons dull with fine rugulose sculpture; vertex laterally and the occiput a little more strongly rugulose; praescutum distinctly scaly punctate, the pronotum, scapulae, scutellum, and axillae more weakly sculptured; abdomen mostly smooth with the petiole broader than long, rugose; first dorsal segment beyond the petiole striate on basal half; first ventral segment beyond petiole striate from base to near apex; antennae cylindrical, the club no thicker than the funicle, first funicle joint about twice as long as thick, much longer than the pedicel, following funicle joints gradually diminishing in length, the fourth about one and one-half times as long as thick, ovate; club two-jointed and not as long as the two preceding funicle joints combined; ocellocular and postocellar lines equal. Black; oral region, and all coxae brownish; antennal scape, legs except coxae, abdomen beneath for the most part, and a large oval spot on the first and second dorsal segments white or very pale yellowish; antennal flagellum pale brownish; wings hyaline; apical joint of all tarsi fuscous.

Male unknown.

Type locality.— Goenoeng Mas, 1200 m. near Buitenzorg, Java

Type.— Cat. No. 24652, U. S. Nat. Mus.

Host.— *Gracilaria theivora* Walsingham.

Described from three female specimens received with letter dated November 27, 1919, from Mr. LEEFMANS under his lot C, and said to have been reared from the larva of the above named host. All three specimens mounted on card points.

***Pleurotropis lividiscutum*, new species.**

This species apparently differs from all other oriental species of the genus in having the scutellum black with a broad median longitudinal stripe of bright steel blue.

Female.—Length 1.75 mm. Antennae 8-jointed; scape slightly fusiform, nearly cylindrical; pedicel about twice as long as broad; apparently only a single ring-joint; funicle three-jointed, the joints each with a short peduncle at apex; funicle joint two oblong, very slightly shorter than one; joint three exclusive of the apical peduncle subquadrate; club scarcely thicker than the funicle and a little more than two-thirds the length of the last two funicle joints combined, distinctly two-jointed, the basal joint subequal in length to the last funicle joint, the second joint conic ovate, about three-fourths as long as and much narrower than the basal joint and terminating in a distinct spur. Head viewed from in front semicircular, broader than long, the vertex straight, beneath evenly rounded or nearly; vertex and frons above the frontal ledge strongly and rather coarsely reticulate punctate, below the frontal ledge to base of antennae similarly but not quite so coarsely sculptured; a narrow area immediately below the bases of antennae and extending from one eye margin to the other nearly smooth and polished; oral region and the cheeks finely reticulate-punctate; eyes hairy; dorsum of pronotum weakly margined anteriorly and nearly smooth; mesoscutum reticulate-punctate, with the two depressions before the scutellum finely obliquely striated; scutellum medially and apically reticulate, laterally longitudinally striated; propodeum mostly polished, the paired median carinae slightly separated at base and diverging posteriorly; spiracles small and circular; posterior tibial spur slender and reaching to the middle of second tarsal joint; marginal vein much longer than the submarginal; postmarginal and stigmal subequal, the former very slightly the longer; abdomen a little longer than the head and thorax combined, distinctly petiolate; the petiole rugose and twice as broad as long; first tergite beyond the petiole comprising approximately two-fifths of the total length of abdomen, smooth and polished; tergites beyond the first subequal and very faintly reticulated; ovipositor not exerted. Dorsal part of head and smooth part of face more or less blue-green; antennae including scape black with a metallic reflection; palpi pale; broad median stripe down the middle of scutellum and the apex laterally, comprising the reticulated portion, metallic blue; propodeum brassy green; remainder of thorax and all legs except their tarsi black with a faint purplish tinge in some lights; tarsi except apical joint pale; abdomen purplish black, the first tergite bluish in some lights.

Male unknown.

Type locality.—Padang, Sumatra.

Type.—Cat. No. 24657 U. S. Nat. Mus.

Described from four female specimens, two of which are badly broken, received from S. LEEFMANS under his Lot No. 4 of letter dated April 8, 1919, and said to have been reared from cocoons of a Braconid specimens of which were also sent under his No. 3. The host has been determined by S. A. ROHWER as a new species of *Apanteles* and will be described by him. ¹⁾

Antennae from a paratype mounted on a slide; other material mounted on card points.

¹⁾ Described under the name: *Apanteles hidaridis* ROHWER.

Euplectrus species.

Two male specimens of an *Euplectrus* impossible to positively identify but which apparently is very similar to *Euplectrus melanocephalus* GIRAULT, an Australian species, were sent by Mr. LEEFMANS with his letter dated November 27, 1919, under his No. 305, and are said to have been reared from (young) larvae of a Noctuid moth, *Ophideres fullonica* LINNÉ at Buitenzorg, Java.

Tetrastichus australasiae, new species.

Resembles (*Entedon*) *Tetrastichus hagenowi* RATZEBURG but may be distinguished by the smaller size, by the less hairy praescutum, and by the first funicle joint being shorter than the pedicel.

Female. — Length 1.2 mm. Eyes hairy; antennal scape slender; pedicel nearly three times as long as thick, rather slender; three distinct ring-joints; first funicle joint and the ring-joints combined about equal to the length of pedicel; second funicle joint slightly shorter than the first, about twice as long as broad; third funicle joint slightly shorter than the second; club 3-jointed and slightly longer than the last two funicle joints combined; head, pronotum, mesoscutum, axillae, and scutellum finely distinctly lineolate-reticulate, propodeum mostly smooth, with a few faint wrinkles around the spiracles, without a median carina; praescutum with an obscure median groove (in some specimens this is apparently absent) and without hairs except for about three stiff setae on each side near the parapsidal grooves; two grooves on the scutellum distinct; prepectus distinctly sculptured; mesopleura practically smooth; abdomen subpetiolate, apparently without sculpture (collapsed and badly wrinkled); ovipositor barely showing at tip; submarginal vein distinctly broken with three erect bristles above.

Black; scape, pedicel, legs including all coxae, short abdominal petiole and the tegulae pale yellow; antennal flagellum dark brown; mouth and a line from base of each antenna to the clypeus reddish; wings hyaline.

Type locality. — Padang, Sumatra.

Type. — Cat. No. 24658 U. S. Nat. Mus.

Host. — *Periplaneta australasiae* FABRICIUS.

Seventeen females received from S. LEEFMANS with his letter dated April 8, 1919, under lot No. 1, and said to be parasitic in the egg capsules of the above named Blattid. Antenna of a paratype slide mounted; other material on card points.

Family Elasmidae.**Elasmus brevicornis**, new species.

Differs from other species of the genus known to the writer in the short antenna, none of the funicle joints being much longer than broad.

Female. — Length 1.6 mm. Antennal scape slender, pedicel obconical and a little less than twice as long as thick; ring-joint small; first funicle joint and ring-joint together subequal in length to the pedicel, the first funicle joint one-third longer than broad; second and third funicle joints subquadrate; club slightly thicker than the funicle, 3-jointed, the joints subequal in length, the first and second joints broader than long, the apical one cone-shaped; frons and vertex with large round punctures; pronotum and mesonotum weakly shagreened and covered with long recumbent hairs; scutellum

and axillae faintly reticulated and without vestiture except for the usual paired bristles on scutellum; postscutellum triangular; propodeum practically smooth; abdomen smooth, and a little longer than head and thorax; pleura except the mesepimeron finely striated, the hind coxae and femora outwardly similarly but a little more distinctly lineated.

Black with a faint metallic lustre; postscutellum white at base, translucent at apex; tegulae whitish basally, brownish apically; antennal flagellum pale brownish; scape and pedicel pale yellowish; front legs except base of coxae, middle and hind trochanters, tibiae and tarsi grayish white, the hairs on legs black; wings hyaline; abdomen blackish with the venter except apically, the apex of first dorsal segment and more or less of the second dorsal segment yellowish. Male unknown.

Type locality.— Buitenzorg, Java.

Type.— Cat. No. 24654, U. S. Nat. Mus.

Host.— *Erionota thrax* LINNÉ.

Described from three female specimens received November 27, 1919, from S. LEEFMANS under his No. 306, and said to be parasitic upon larvae of the above named Hesperid.

Antenna of type mounted on a slide; other material on card points.

Family Encyrtidae.

Schedius podontiae, new species.

Distinguished from *kuvanae* HOWARD, by the slightly narrower and more weakly sculptured frons and vertex and by the paler antennae and legs.

Female.— Length 0.8 mm. Fronto-vertex at its narrowest part which is opposite the ocelli, about one-third as broad as long, the vertex rather strongly punctate and subopaque, the frons more weakly sculptured, reticulate and distinctly shining; antennal scape slightly expanded beneath at the middle; pedicel twice as long as broad and a little longer than the two basal joints of funicle combined; first, second, and third funicle joints subequal and each barely longer than broad; fourth funicle joint a little longer than broad, the fifth and sixth subquadrate; club as long as the four preceding funicle joints combined, distinctly 3-jointed, the joints subequal; mandibles bidentate, the ventral tooth acute, the inner tooth broad with its apical margin distinctly though not deeply emarginate, its upper and lower angles prominent so that the mandibles might be said to be tridentate; mesoscutum and axillae faintly reticulate, shining; the axillae meeting at the middle but the points of union in some instances covered by the overlapping posterior margin of the mesoscutum, the question of whether the axillae are separated or not depending upon the position in which the specimen died; scutellum broader than long, with fine close punctation over the whole surface, opaque; abdomen subtriangular not longer than the thorax, depressed above; marginal vein, punctiform, barely longer than broad, shorter than the stigmal, postmarginal spur-like.

Black, with a faint metallic sheen on the frons, mesoscutum, and base of abdomen; scape except its extreme apex black; base of pedicel brownish; apex of scape, apex of pedicel and remainder of antennae pale; all coxae and femora black, the trochanters, base and apex of all femora and all tibiae and tarsi pale yellowish wings hyaline.

Male unknown.

Type locality.— Cultuurtuin, Buitenzorg, Java.

Type.— Cat. No. 24655 U. S. Nat. Mus.

Host.— *Podontia affinis* GROND.

Described from nine females received November 27, 1919, from S. LEEFMANS under his No. 304, and said to have been reared from eggs of the above named host. Antennae and mandibles of a paratype mounted on a slide; other material on card points.

Leurocerus ovivorus CRAWFORD.

Four specimens of this species, reared from eggs of *Amathusia phidippus* LINNÉ at Padang, Sumatra, were received from Mr. LEEFMANS with his letter of April 8, 1919, and under his lot No. 2.

Superfamily Serphoidea.

Family Scelionidae.

Telenomus latisulcus CRAWFORD.

Three female specimens received from S. LEEFMANS (on order of Dr. CH. BERNARD) with his letter dated November 27, 1919, and under his No. 277, bred from the eggs of *Poecilocoris* sp. (since identified by Dr. CH. BERNARD as *P. hardwicki* WESTWOOD), Boekanegara, Preanger, Java, apparently agree with the types of this species except that they are slightly larger and the scutellum appears to be a little more convex. The originally recorded host for this species is *Biprorulus bibax* from Formosa. The U. S. National Museum possesses specimens also, said to have been reared from *Xylocopa rufescens* at Arabidacodl Estate, India, and specimens from Coimbatore, India, parasitic on Pentatomid eggs reared May 26, 1913, both the last mentioned lots received from E. BALLARD, Government Entomologist of Coimbatore.